Seismic Zones in India

2325. SHRI RAGHAVJI:
PROF. VIJAY KUMAR MALHOTRA:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) what are the seismic zones in India;

(b) whether any corrective/preventive measures have been taken to lessen the gravity of earthquakes; if so, the details thereof;

(c) whether any seisms have been predicted for Khandwa region of M.P. and

(d) if so, the details thereof together-with the steps taken in the matter?

THE MINISTER OF HUMAN RESOURCE DEVELOPMENT AND MINISTER OF SCIENCE AND TECHNOLOGY (DR. MURLI MANOHAR JOSHI): (a) The country has been divided into five seismic zones by Bureau of Indian Standards based on the inputs from a number of agencies. Zone V is the most seismically active region while zone I is the least. Broadly, the zone-V comprises entire North-Eastern India, parts of Jammu & Kashmir, Himachal Pradesh, West Uttar Pradesh, Rann of Kutch, North Bihar and Andaman Nicobar Islands. Zone-IV covers remaining parts of Jammu & Kashmir, Bihar and Himachal Pradesh, Union Territory of Delhi, Northern parts of Uttar Pradesh, Sikkim, parts of West Bengal, Rajasthan & Gujarat and small portion of Maharashtra near west coast. Zone III comprises of Kerala, Goa, remaining parts of Punjab, Uttar Pradesh and West Bengal, parts of Maharashtra and Madhya Pradesh. The remaining parts of the country fall in zones I &II.

(b) The zoning map depucts the intensity or the peak ground acceleration with which an area is broadly associated. Based on these estimates, the Bureau of Indian Standards has publish guidelines/manuals for design of earthquake resistant structures for different zones.

(c) and (d) No,. Sir. There is no scientific technique anywhere in the world to forecast the occurrence of earthquakes with reasonable degree of accuracy, with regard to space, time and magnitude.

12.00 NOON

PAPERS LAID ON THE TABLE

I. Notifications of the Ministry of Food and Consumer Affairs.

II. Reports and Accounts (1997-98) of various fertiliser corporations and companies and related papers.

THE MINISTER OF CHEMICALS AND FERTILISERS AND MINISTER OF FOOD AND CONSUMERS AFFAIRS (SHRI SURJIT SINGH BARNALA): Sir, I lay on the Table:—

I. (i)A copy each (in English and Hindi) of the following Notifiations of the Ministry of Food and Consumer Affairs (Department of Sugar and Edible Oils), under sub-section (6) of Section 3 of the Essential Commodities Act, 1955:—

(i) G.S.R. 584(E), dated September 17, 1998, publishing the Edible Oils Packaging (Regulation) Order, 1998.

(ii) G.S.R. 710(E), dated November 30, 1998, publishing the Edible Oils Packaging (Regulation) (First Amendment) Order, 1998.

[Placed in Library *See* No. LT-1855/98]

(ii) A copy (in English and Hindi) of the Ministry of Food and Consumer Affairs (Department of Food and Civil Supplies) Notification No. EP. 16(2)/98, dated the 15th October, 1998 publishing the Food Corporation of India (Staff) (2nd Amendment) Regulation, 1998, under sub-section (5) of Section 45 of the Food Corporation Act, 1964.

[Placed in Library *See* No. LT-2390/98]

(iii) A copy (in English and Hindi) of the Ministry of Food and Consumer Affairs (Department of Sugar and Edible Oils) Notification G.S.R. 702(E) dated November 26, 1998 publishing the Corrigendum to notification GSR 584(E), dated the 17th September, 1998.
[Placed in Library *See* No. LT-1855/98]

II. A copy each (in English and Hindi) of the following papers, under subsection (1) of section 619A of the Companies Act, 1956:—

(i) (a) Thirty-second Annual Report and Accounts of the Madras Fertilizers Limited, Chennai, for the year 1997-98, together with the Auditors' Report on the accounts and the comments of the Comptroller and Auditor General of India thereon.
(b) Review by Government on the working of the above Company.
[Placed in Library *See* No. LT-2085/98]

(ii) (a) Twentieth Annual Report and Accounts of the Hindustan Fertilizer Corporation Limited, New Delhi, for the year 1997-98, together with the Auditors' Report on the accounts and the comments of the Comptroller and Auditor General of India thereon.
(b) Review by Government on the working of the above Corporation.
[Placed in Library *See* No. LT-2093/98]

(iii) (a) Thirty-seventh Annual Report and Accounts of the Hindutsn Organic Chemicals Limited, Rasayani (Maharashtra), for the year 1997-98, together with the Auditors' Report on the Accounts and the comments of the Comptroller and Auditor General of India thereon.
(b) Review by Government on the working of the above Company.
[Placed in Library *See* No. LT-1851/98]

(iv) (a) Twenty-fourth Annual Report and Accounts of the National Fertilizers Limited, New Delih for the year 1997-98, together with the Auditors' Report on the Accounts and the comments of the Comptroller and Auditor General of India thereon.
(b) Review by Government on the working of the above Company.
[Placed in Library *See* No. LT-1852/98]

(v) (a) Twentieth Annual Report and Accounts of the Rashtriya Chemicals and Fertilizers Limited, Mumbai, for the year 1997-98, together with the Auditors' Report on the accounts and the comments of the Comptroller and Auditor General of India thereon.
(b) Review by Government on the working of the above Company.
[Placed in Library *See* No. LT-2084/98]

(vi) (a) Forty-second Annual Report and Accounts of the Fertilizers Corporation of India Limited, New Delhi, for the year 1997-98, together with the Auditors' Report on the accounts and the comments of the Comptroller and Auditor General of India thereon.
(b) Review by Government on the working of the above Corporation.
[Placed in Library *See* No. LT-2082/98]

(vii) (a) Eighteenth Annual Report and Accounts of the Krishak Bharati Cooperative Limited, (KRIBHCO) New Delhi, for the year 1997-98, together with the Auditors' Report on the Accounts.

(b) Review by Government on the working of the above Corporation.

[Placed in Library *See* No. LT-185498]

(viii) (a) Thirtieth Annual Report and Accounts of the Indian Farmers Fertiliser Cooperative Limited, New Delhi, for the year 1997-98, together with the Auditors' Report on the Accounts.

(b) Review by Government on the working of the above Cooporative.

[Placed in Library *See* No. LT-185398]

(ix) Statement explaining the reasons for delay in laying Annual Reports of the Food Corporation of India for the years 1996-97 and 1997-98 within the stipulated period.

[Placed in Library *See* No. LT-185698]

I. Report (1995—97) of various Universities and related papers.

II. Notification of the Ministry of Human Resource Development.

III. Reports and Accounts (1997-98) of Central Electronics Limited, New Delhi and National Research Development Corporation, New Delhi and related papers.

IV. Reports and Accounts of various Indian Institutes of Technology, Management, Science+Research Centres, Engineering Educational Academies and Universities and related papers.

मानव संसाधन विकास मंत्री तथा विज्ञान और प्रौद्योगिकी मंत्री (डा० मुरली मनोहर जोशी) श्रीमन्, मैं निम्नलिखित पत्र सभा पटल पर रखता हूं:—

I(i)(1) जामिया मिलिया इस्लामिया अधिनियम, 1988 की धारा 27 की उपधारा (3) के अधीन निम्नलिखित पत्रों की एक-एक प्रति (अंग्रेजी तथा हिन्दी में):—

(i) 1996-97 के वर्ष के लिए का जामिया मिलिया इस्लामिया, नई दिल्ली का वार्षिक प्रतिवेदन।

(ii) उपर्युक्त विश्वविद्यालय के कार्यकरण की सरकार द्वारा समीक्षा।

(2) ऊपर (1) में उलिलखित पत्रों को सभा पटल पर रखने में हुए विलंब के कारणों को दर्शाने वाला विवरण (अंग्रेजी तथा हिन्दी में)।

(पुस्तकालय में रखी गई। देखिए सं० एल०टी० 1648/98)

(ii)(1) नागालैंड विश्वविद्यालय अधिनियम, 1989 की धारा 31 की उपधारा (3) के अधीन निम्नलिखित पत्रों की एक-एक प्रति (अंग्रेजी तथा हिन्दी में):—

(क) 1995-96 के वर्ष के लिए नागालैंड विश्वविद्यालय, ल्यूमनी, कोहिमा का दूसरा वार्षिक प्रतिवेदन।

(ख) उपर्युक्त विश्वविद्यालय के कार्यकरण की सरकार द्वारा समीक्षा।

(2) ऊपर (1) में उल्लिखित पत्रों को सभा पटल पर रखने में हुए विलंब के कारणों को दर्शाने वाला विवरण (अंग्रेजी तथा हिन्दी में)।

(पुस्तकालय में रखी गई। देखिए सं० एल०टी० 1647/98)

II. कलाक्षेत्र प्रतिष्ठान अधिनियम, 1993 की धारा 33 के अधीन कलाक्षेत्र प्रतिष्ठान की वित्त समिति और शासी बोर्ड की शक्तियों और कार्यों के संबंध में कला क्षेत्र प्रतिष्ठान नियम, 1998 को प्रकाशित करने वाली मानव संसाधन विकास मंत्रालय की अधिसूचना सा०का०नि० 414(अ) दिनांक 29 जुलाई, 1998 की एक प्रति (अंग्रेजी तथा हिन्दी में)।

(पुस्तकालय में रखी गई। देखिए सं० एल०टी० 2052/98)